

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 82.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-025412**Date Inspected:** 20-Jul-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1500**Contractor:** Westmont Industries**Location:** Santa Fe Springs, CA**CWI Name:** Ruben Dominguez**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006 L & R**Component:** Maintenance Travelers**Summary of Items Observed:**

On this date, Caltrans Quality Assurance Inspector (QA) Sherri Brannon is present at the Westmont Industries (WMI) jobsite in Santa Fe Springs, California for the purpose of observing fabrication and QC functions for the SAS Superstructure, Bid Item #99, Maintenance Traveler and Bid Item #100, Maintenance Traveler (Bike Path).

**E2/E3 Bike Path Traveler**

This QA Inspector made random shop observations and observed no fit-up performed on the E2/E3 Bike Path Traveler Assemblies on this date.

**SAS-WB Traveler – Lower Truss Frame Assembly**

Welding Completed on the SAS-WB Traveler – Lower Truss Frame Assembly on Thursday 5-12-11. Quality Control Mr. Dominguez informed QA Inspector that Smith Emery did complete visual inspection and waiting on WMI to weld and grind on some area's found by visual inspection. QA Inspector randomly observed WMI personnel grinding pick-up area's found by QC on this date. Grinding was not completed on this date.

**E2/E3-WB Traveler**

This QA Inspector randomly observed WMI production personnel Mr. Richard Fuentes WID #3201 and one helper, performing layout, fitting and tack welding activities at various locations for the E2/E3-WB Traveler Assemblies. This QA Inspector observed Mr. Fuentes performing the FCAW in all positions randomly throughout the shift.

This QA Inspector observed WMI production welder Mr. Charles Newton (WID # 3200) continuing to perform

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## WELDING INSPECTION REPORT

( Continued Page 2 of 4 )

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Flux Core Arc Welding (FCAW) activities on the E2/E3-WB Traveler Assemblies. This QA Inspector observed Mr. Newton performing the FCAW in all positions randomly throughout the shift.

### SAS-WB Traveler - Fixed Stair Section

This QA Inspector randomly observed WMI production personnel Mr. Cesar Canales WID #3195 and helper Mr. Jesus Rayas WID#3197, performing layout, fitting and tack welding activities at various locations for the SAS-WB Traveler Assemblies. This QA Inspector observed Mr. Canales performing the FCAW in all positions randomly throughout the shift.

This QA Inspector randomly observed WMI personnel in the process of welding to touch up the ten (10) trolley links. QA observed the WMI CWI QC Mr. Ray Anaya was monitoring the in-process welding. Touch-up welding on the above trolley links completed on this date.

This QA Inspector randomly observed that Smith Emery, CWI, QC Inspector Mr. Ruben Dominguez was present, during the above mentioned welding and fitting activities. During random observation, this QA Inspector observed that the applicable WPS's and copies of the shop drawings, appeared to be located near each work station, where the above mentioned welding and fitting activities were being performed. This QA Inspector randomly verified that the consumable material, utilized during the welding appeared to be in compliance with the applicable WPS and that the above mentioned welders were currently qualified for the applicable process and position of welding. This QA Inspector randomly observed QC Inspector Mr. Dominguez verifying the in-process welding parameters, including voltage, amperage, pre-heat and travel speed and the parameters appeared to be in compliance to the applicable WPS.

This QA Inspector observed that the activities mentioned above, appeared to be in compliance with the contract requirements and this QA Inspector observed no non-conforming issues, on this date.

### RPI Coating (Blast and Paint)

This QA Inspector performed random shop observations and observed that RPI is on site to continue abrasive blast and prime coat Trolley Links Assemblies. QA Inspector was informed by RPI Coating Quality Control (QC) Representative Mr. Miguel Nunez that RPI is going to continue abrasive blasting and apply the Sherman Williams Zinc Clad II prime coat to the Trolley Links today.

This QA Inspector randomly observed RPI Coating personnel performing sanding dry spray or overspray on Trolley links that were prime coated 7-12-11 using scotch brite heavy duty. Mr. Nunez stated that RPI will be re-applying additional prime coat to link assemblies that had been prime coated on 7-12-11 that the DTF thickness reading were below required mil thickness. Later in the shift, QA Inspector randomly RPI Coating applying additional prime coating to the remainder twenty-six (26) of the fifty-four (54) trolley links that showed low thickness readings. Environmental readings taken by RPI at the time of primer application are as follows: Air Temperature 78 F, Relative Humidity 52%, Wet Bulb Temperature 66 F, Dew point 60 F and Surface Temperature 77 F.

This QA Inspector performed measurement on dry film thickness (DFT) with Type 2 (magnetic gage), DFT's thickness reading of the prime coated Trolley Links Assemblies prime coated on 07-19-11 are an average of three (3) thickness reading are as follows 4.5 mils, 3.4 mils, 3.5 mils 4.9 mils, 3.8 mils, and 6.3 mils. QA Inspector also,

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## WELDING INSPECTION REPORT

( Continued Page 3 of 4 )

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observed Mr. Nunez documenting daily activities on RPI Coating, Daily Inspection Report.

Mr. Nunez informed QA Inspector's Sherri Brannon and Fintan Shanley that on the interim coating inspection of the Sherman Williams Zinc Clad II, Inorganic Zinc Rich prime coating he would be performing ASTM D3363 Film Hardness by Pencil Test, ASTM D4752 Measuring MEK Resistance to Ethyl Silicate (Inorganic) Zinc-Rich Primers by Solvent Rub. Mr. Nunez stated that he will be using Sherman Williams R7 KIII High Solids compliant thinner #1 for the solvent rub test and performing the Quarter test. QA Inspector's Brannon and Fintan Shanley observed Mr. Nunez performing the above mentioned test. Testing observed by QA Inspector's appeared to comply with contract documents.

This QA Inspector randomly observed RPI Coating personnel sanding dry spray or overspray on Trolley links that were prime coated 7-12-11 using scotch brite heavy duty. After sanding was completed QA Inspector observed RPI Coating personnel water rinsing trolley links with a minimum pressure of 35Mpa/5,077 PSI pressure washer. After rinsing was completed RPI moved the components inside Bay 6. QA Inspector's observed prime coating applications appear to comply with contract documents.

Note: The above mentioned Trolley Link Assemblies had been previously abrasive blasted and primed coated and was determined by Sherman Williams Representative Mr. Eric Anderson, RPI Coating Mr. Gary McDonald and RPI Coating Mr. Carlos Torres that RPI Coating had greatly exceeded the 3.4 mils to 5.9 mils for prime coating requirements and made the decision to re-blast and re-prime Suspension Arms and Trolley Link Assemblies. RPI Coating Mr. Gary McDonald and RPI Coating Mr. Carlos Torres will also reevaluate the E2/E3 EB Traveler prime coating thickness at a later date.



### Summary of Conversations:

As stated within this report.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy (510) 385-5910, who represents the Office of Structural Materials for your project.

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## WELDING INSPECTION REPORT

( Continued Page 4 of 4 )

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<b>Inspected By:</b>	Brannon, Sherri	Quality Assurance Inspector
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<b>Reviewed By:</b>	Lanz, Joe	QA Reviewer
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